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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/385,278	08/30/1999	JOHAN P.M.G. LINNARTZ	PHN17.090	8922

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US PHILIPS CORPORATION
580 WHITE PLAINS RD
TARRYTOWN, NY 10591

EXAMINER

LEE, RICHARD J

ART UNIT

PAPER NUMBER

2613

8

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/385,278

Applicant(s)
Linnartz et al

Examiner
Richard Lee

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The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-848) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

2. The drawings are objected to because:

(1) all diagrammatic blocks are required to be labeled to indicate contents or function (37 C.F.R. 1.83(a), 1.84(o)). Therefore, diagrammatic blocks as shown in Figures 1, 3, 5, and 6 are required to be labeled; and

(2) block element 662 of Figure 6 of the drawings has not been identified in the Specification. It seems that "663" as shown at page 7, lines 16 and 22, respectively in the Specification should be changed to "662".

3. Applicant is required to submit a proposed drawing correction in response to this Office action. However, correction of the noted defect can be deferred until the application is allowed by the examiner.

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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5. The abstract of the disclosure is objected to because phrases which can be implied, such as "invention" appearing at lines 1 and 14 of the Abstract should be avoided. Correction is required.

See MPEP § 608.01(b).

6. Claims 4-8 and 10-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For examples:

(1) claim 4, line 3, the phrase "similarly encoded" as claimed is vague and indefinite in that it is unclear what is meant by similarly encoded;

(2) claim 6, line 1, "the video signal" shows multiple antecedent basis (see claim 1, lines 2 and 3);

(3) claim 8, line 2, "the modified video signal pattern" shows no clear antecedent basis;

(4) claim 10, line 5, "said first bitstream" shows no clear antecedent basis;

(5) claim 11, line 5, "said first bitstream" shows no clear antecedent basis;

(6) claim 12, line 3, "the first bitstream" shows no clear antecedent basis;

(7) claim 14, lines 2-3, "said first bitstream" shows no clear antecedent basis;

(8) claim 15, line 2, before "video", "the" should be deleted for clarity;

(9) claim 15, line 5, "said first bitstream" shows no clear antecedent basis;

(10) claim 16, line 2, before "video", "the" should be deleted for clarity;

(11) claim 16, line 5, "said first bitstream" shows no clear antecedent basis;

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(12) claim 17, line 3, "said first bitstream" shows no clear antecedent basis; and

(13) claim 18, line 5, the phrase "being encoded in a similar manner" as claimed is vague and indefinite in that it is unclear what is considered a similar manner.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 10-13, 15, 16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawamae et al (6,404,781).

Kawamae et al discloses a data transmission method for embedded data as shown in Figures 2-5, and 8, and the same video signal, method and arrangement of decoding a digital video signal, and arrangement and method of transcoding a digital video signal as claimed in claims 10-13, 15, 16, and 18, comprising the same means (i.e., 4 of Figure 5) for receiving a main

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bitstream representing an image of a video signal; means (i.e., additional information data, see Figure 3, and column 1, lines 25-34, column 6, lines 49-56, column 7, lines 37-57, column 9, lines 17-22, column 10, lines 38-49) for receiving an auxiliary bitstream representing replacement video information for an image area of the image, the auxiliary bitstream is accommodated in user data fields of the first bitstream; means for replacing a sub-series of bits of the first bitstream representing the image area by the replacement video information to obtain a modified bitstream (i.e., additional information data are embedded into the video data, thereby replacing a sub-series of bits of the video data representing the image area and providing the modified bitstream, see column 1, lines 25-34, column 6, lines 49-56, column 7, lines 37-57, column 8, lines 5-35, column 9, lines 17-22); means (see 5, 9 of Figure 5) for transmitting the modified bitstream; means (13 of Figure 5) for decoding the modified bitstream; an image area of the video signal being encoded into a sub-series of bits and the replacement video information being encoded in a similar manner and represented by a substantially same number of bits as the sub-series (i.e., 8 of Figure 5); and deriving the position and/or size of the image area from data included in the auxiliary bitstream (see Figure 3 and column 7, lines 37-57).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamae et al as applied to claims 10-13, 15, 16, and 18 in the above paragraph (8), and further in view of Epstein (6,490,355).

Kawamae et al discloses substantially the same arrangement and method as above, but does not particularly disclose means for determining whether the image area represented by the sub-series of bits of the first bitstream identifies copy protection status information and means for enabling recording of the modified bitstream if the determination is positive as claimed in claims 14 and 17. It is noted that Kawamae et al does teach copy control information for inhibiting playback and/or inhibit of outputting of the reproduced signal (see column 9, lines 1-4, lines 51-56), but not particularly copy protection status information and the means for enabling recording of the modified bitstream if the determination is positive as claimed. However, Epstein discloses a method and apparatus for use of a time dependent watermark for the purpose of copy protection as shown in Figures 1 and 3, and teaches the conventional means for determining whether the image area identifies copy protection status information and means for enabling recording of the modified bitstream if the determination is positive (see column 2, lines 39-58, column 4, lines 16-59, column 5, line 61 to column 6, line 21). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kawamae et al and Epstein references in front of him/her and the general knowledge of copy protections in recordings/reproducing of video, would have had no difficulty in providing the means for determining whether the image area identifies copy protection status information and means for enabling recording of the modified bitstream if the determination

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is positive as taught by Epstein for the video image encoding and decoding as shown in Figure 5 of Kawamae et al for the same well known copy protection of video data purposes as claimed.

11. Claims 1-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamae et al as applied to claims 10-13, 15, 16, and 18 in the above paragraph (8), and further in view of Vynne et al (5,960,081).

Kawamae et al discloses substantially the same arrangement and method as above, further including an arrangement and method for transmitting a video signal comprising means (i.e., 4 of Figure 5) for receiving an image of an original video signal; means (i.e., additional information data, see Figure 3, and column 1, lines 25-34, column 6, lines 49-56, column 7, lines 37-57, column 9, lines 17-22, column 10, lines 38-49) for modifying an image area of the image to create a modified video signal; means (8, 9 of Figure 5) for transmitting the modified video signal; the video signal is encoded into a bitstream and the image area is represent by a sub-series of bits (see 8 of Figure 5); and wherein the video signal is predictively encoded and the step of modifying is applied to pictures which are not referred to by other pictures (see column 19, lines 38-49).

Kawamae et al does not particularly disclose characterized in that the arrangement includes means for transmitting an auxiliary signal defining a sub-image to replace the modified image area of the modified video signal, wherein the replacement video information is the image area of the original signal, the replacement video information is similarly encoded and represented by a substantially same number of bits as the modified image area, and the auxiliary signal is accommodated in user data fields of the bitstream and includes data defining the position and/or

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size of the replacement video information, as claimed in claims 1-5, and 9. However, Vynne et al discloses an embedding of a digital signature in a video sequence as shown in Figures 2.1-2.3, and teaches the conventional replacement of modified image areas such as logos with the original image or superimposing another logo (see column 1, lines 11-42). And it is considered obvious to incorporate such video replacement within the image coding and decoding system as shown in Figure 5 of Kawamae et al to thereby provide substantially the same auxiliary signal (i.e., replacement video of Vynne et al) defining a sub-image to replace the modified image area of the modified video signal, wherein the replacement video information is the image area of the original signal, the replacement video information is similarly encoded (i.e., 8 of Figure 5 of Kawamae et al) and represented by a substantially same number of bits as the modified image area, and the auxiliary signal is accommodated in user data fields of the bitstream and includes data defining the position and/or size of the replacement video information (see Figure 3 of Kawamae et al and column 7, lines 37-57, column 10, lines 38-49). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kawamae et al and Vynne et al references in front of him/her and the general knowledge of video replacements of logos, would have had no difficulty in using the teachings of Vynne et al involving the replacement of modified image areas such as logos with the original image to provide substantially the same replacement of modified image areas such as watermarks with the original image within image coding and decoding systems of Kawamae et al for the same well known removal of channel logos and watermarks and replacement with original

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video data so as to not be able to authenticate and distinguish the source of video purposes as claimed.

12. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kawamae et al and Vynne et al as applied to claims 1-6, 9-13, 15, 16, and 18 in the above paragraphs (8) and (11), and further in view of Epstein (6,490,355).

The combination of Kawamae et al and Vynne et al discloses substantially the same arrangement and method as above, further including wherein the image is modified in such a manner that the modified video signal pattern is not reproduced upon playback by conventional analog video recorders (i.e., the logo may be removed, thereby not being able to be reproduced upon playback, see column 1, lines 11-42 of Vynne et al).

The combination of Kawamae et al and Vynne et al does not particularly disclose wherein the modification of the image area identifies copy protection status information as claimed in claim 7. It is noted that Kawamae et al does teach copy control information for inhibiting playback and/or inhibit of outputting of the reproduced signal (see column 9, lines 1-4, lines 51-56), but not particularly copy protection status information as claimed. However, Epstein discloses a method and apparatus for use of a time dependent watermark for the purpose of copy protection as shown in Figures 1 and 3, and teaches the conventional identification of copy protection status information (see column 2, lines 39-58, column 4, lines 16-59, column 5, line 61 to column 6, line 21). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kawamae et al, Vynne et al, and Epstein references in front of him/her and the general

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knowledge of copy protections in recordings/reproducing of video, would have had no difficulty in providing the identification of copy protection status information as taught by Epstein for the video image encoding and decoding as shown in Figure 5 of Kawamae et al for the same well known copy protection of video data purposes as claimed.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wehrenberg discloses a method and apparatus for copy protection.

Birks et al discloses a logo insertion based on constrained encoding.

Florencio et al discloses a logo insertion using only disposable frames.

Horton discloses animated on screen display provisions for an MPEG video signal processing system.

Matsumi et al (5,959,796 and 5,479,299) disclose a method of transmitting digital video and audio signals between bit rate reduction encoded signal recording and reproducing systems.

Meer et al discloses a subtitling transmission system.

14. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

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or faxed to:

(703) 872-9314, (for formal communications intended for entry)

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (703) 308-6612. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group customer service whose telephone number is (703) 306-0377.


RICHARD LEE
PRIMARY EXAMINER

Richard Lee/rl

4/4/03

